Control Import Permit Material

Processing Incoming Control Import Permit Material

All new introductions are processed according to ACPC general operational standards. Conversely, the ACPC receives leaf samples for those materials intended only for pathogen testing by the sponsor.

Pathogen Testing

High throughput sequence analysis will be performed on incoming selections according to the procedures described in the the study of Villamor et al., 2022 (Plant Disease 106:518-525) and is subject to revision at any time as new information becomes available.

PCR is used to confirm presence of borderline HTS (<2% genome coverage) positive selections and also Xylella and phytoplasmas. Those samples tested positive will be re-extracted and re-tested by PCR for corresponding virus and further verified by Sanger sequencing.

Recording Test Results

All introductions are assigned a unique ID number and all lab testing is conducted under a project number. When the test is complete, results from the record sheet are entered into the ACPC database.

Qualifications for release

Selections will undergo HTS testing four times to ensure the absence of viruses or virus-like agents:

- First Test: Upon receipt of the material.

- Second Test: Conducted 3-4 months after the initial test.

- Dormancy Period: If the first two tests are negative for viruses or virus-like agents of concern, the plants must undergo a dormancy period (0-7°C for at least 1000 hours).

- Third Test: Performed no less than three (3) months after the dormancy period.

- Fourth Test: Conducted 3-4 months after the third test.

The expected timeframe between introduction and release is 12-15 months. If USDA recommends a longer period between testing, ACPC will comply to the longer timelines.

The results of each HTS test will be documented and entered into the ACPC database and a thorough review of the results will be conducted to ensure accuracy and compliance with the testing protocol.

A plant introduction that tests negative for viruses and/or virus-like agents of concern in all four testing phases will be eligible for full release, yet the decision lies with USDA-APHIS.

Establishment of G1 Plants

Should a berry introduction qualify for full release status, the procedure to be followed is dependent on the ownership status of the introduction, either public or proprietary. G1 plants will be established inside a USDA-APHIS certified growth chamber or greenhouse and is the responsibility of the ACPC plant production staff.

Maintenance and Retention Testing of G1 Plants

When testing is completed and selections are negative for viruses and virus-like agents of concern, material is distributed under registered protocols.

The maintenance and testing of berry selections are in accordance with NAPPO standards. These protocols shall be subject to revision as new information becomes available.